ABSTRACT

An error correction and encoding process is applied to a codestream being encoded in the process of encoding a picture in for example the JPEG-2000 system, or to an encoded codestream obtained by the encoding process, extremely readily and efficiently. For example, in generating an encoded codestream in accordance with the JPEG-2000 system, in a picture encoding apparatus, error correction encoding is applied to for example data of a header or to data of packets of an uppermost layer and a layer subjacent to the uppermost layer, to produce an inspection symbol, which is then embedded in its entirety in for example the lowermost layer. A picture decoding apparatus extracts this inspection symbol to perform error correction.